

Abstract

Title of diploma thesis: Testing physical assumptions of swimmers and modern pentathlonists

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Objective: Target is to test the swimmers and modern pentagons in the age from 9 - 13 years. Furthermore to evaluate and tabulate the results. Compare the selected results in-between the groups and assess whether the training is affecting the level of certain motor assumptions, physical abilities and selected body parameters.

Methodology: The research method of this work is comparison. The research group was composed by children from the SK Motorlet Praha ($n = 13$, mean age 11.5 ± 1.1 years) and children from the modern pentagon Dukla Praha ($n = 10$, mean age 10.5 ± 0.8 years). Tested objects were participated in motor-fitness tests - Cooper's test (running and swimming test 12 minutes), joint mobility test (shoulder, lumbar spine and hip segment), lower limb dynamics test, absolute upper limb strength, postural stability and body composition test. The measured results were evaluated and compared. The final results should be used as an recommendations for practice use.

Results: The results of the group comparisons are presented in the practical part of this work, including the answers to the research questions. The results obtained are a significant source for the future planning of the training process.

Keywords: motor skills, swimming, modern pentathlon, sports training, tests, children